#### Report of the IUGG Tsunami Commission Business Meeting

on Thursday, July 10, 2003, 19:00 – 20:30, Emerald Room 10 at the Royton Hotel, Sapporo, Japan

The IUGG Tsunami Commission business meeting was held on July 10 at 19:00 to 20:30 in Room 10 at the Royton Hotel just after the completion of the IUGG Tsunami Symposium JSS07. The meeting was attended by the following Commission members: Abe K., Bernard E., Camfield F., Gonzalez F., Gusiakov V., Imamura F., Iwasaki S.-I., Levin B., Marchuk A., Nishimura Y., Okal E., Pelinovsky E., Satake K., Tinti S., Tsuji Y., Yalciner A. Preliminary agenda of the meeting was posted on the Tsunami BB on March 27, 2003 and the final annotated agenda was posted on June 16, 2003.

#### 1. Chairman's report on the activity of the Commission in 2001-2003

Dr.V.Gusiakov, Chair of the Commission, reported on the activity of the Commission since its previous business meeting in Seattle in 2001. The activity included sponsoring the tsunami related meetings, conferences and workshops and publications of their proceedings, coordination of tsunami related projects, interaction with the IOC/UNESCO (ICG/ITSU) and the IUGG official bodies (Associations and commissions), supporting information and data exchange.

Since August of 2001, the following meetings were organized or sponsored by the Tsunami Commission:

The Joint IUGG/TC – ICG/ITSU Workshop "Tsunami Mitigation and Countermeasures", Cartagena, Colombia, October 5-6, 2001 (in conjunction with the XVIII Session of the ICG/ITSU).

The Joint IUGG/TC – ICG/ITSU Workshop "Local Tsunami Warning and Mitigation", Petropavlovsk-Kamchatskiy, Russia, September 10-15, 2002.

The XX biannual International tsunami symposium - IUGG 2003 inter-association symposium JSS7 "Tsunamis: Their Science, Engineering and Hazard Mitigation", Sapporo, Japan, July 9-10, 2003.

The International Tsunami Workshop "Tsunamis and Volcanic Eruptions", (in commemoration of 120 years of the 1883 Krakatau eruption), Jakarta, Indonesia, August 26-29, 2003

The Joint IUGG/TC - ICG/ITSU Workshop "Tsunamis in the South-West and Central Pacific - research towards preparedness and mitigation", Wellington, New Zealand, September 25 to 26, 2003 (in conjunction with the XIX Session of the ICG/ITSU).

The Commission sponsors and coordinates the two international tsunami-related projects – Historical Tsunami Database for the Pacific (HTDB/PAC) and Tsunami Inundation Modeling Exchange (TIME). Dr.V.Gusiakov, HTDB/PAC Leading Coordinator, reported on the present status and future perspectives of the HTDB/PAC Project, that is the joint IUGG/TC – ICG/ITSU initiative directed to the development of the comprehensive tsunami database in the standardized format covering the entire Pacific region and the whole period of available historical observations. The first stage of the project was completed in 2002 and resulted in the CD-ROM "Tsunamis in the Pacific, 47 D.C. – 2002 A.D". The current version of the database (4.8 of December 31, 2002) covers the period from 47 B.C. to present time and contains 1440 entries in the tsunamigenic event catalog and almost 7000 run-up heights provided with the exact geographical coordinates of observational sites. The tsunami and earthquake catalogs, collected within the HTDB Project, are embedded inside a specially developed GIS-type graphic shell (WinHTDB) for easy data retrieval, visualization and processing. The WinHTDB shell operates on Windows PC platforms with no additional co-located software required. Further development of the HTDB/PAC Project is seen as improvement of the data quality and completeness, that will be done with the help of HTDB Regional Coordinators. Dr. V. Gusiakov briefly informed the Commission members on the results of the working meeting of representatives of the NGDC, the ITIC and the NTL that was held in Sapporo on July 8. The purpose of the meeting was to determine the plan and to prepare a necessary action sheet on the development of the Global Historical Tsunami Database (GHTD) by means of merging two separate databases currently supported by the NGDC and the NTL.

Dr.F.Imamura, the leader of the Tohoku Tsunami Group, reported on history and status of the TIME Project that was launched in 1995 with the purpose to transfer technology of the tsunami modeling to developing countries. Since then, the TIME software package was transferred to more than 15 countries and experts from these countries have been trained in the package application. The Phase-I of the TIME Project was completed in 1997, however, demands for the standardized tsunami modeling technology is still very high, especially in developing countries facing tsunami hazard. In many countries of the Pacific and Caribbean regions the TIME package is extensively used for computation of tsunami inundation maps for particular coastal locations. The plan and the budget for the TIME Phase-II Project was submitted to the XVII Session of the ICG/ITSU, however, due to the lack of available funds, has not been launched till now. In their comments, the Commission members have stressed the needs to continue efforts for further implementing the TIME Project.

# 2. Publication of Proceedings of the Sapporo Symposium

According to the long-term commission tradition, the biannual tsunami symposia are followed by publication of the volume of selected papers. It was decided to publish the 2003 IUGG Tsunami Symposium proceedings as a volume of the selected papers in the Kluwer's series "Advances in Natural and Technological Hazards Research" with Kenji Satake as the Chief Editor. He will contact the Kluwer on the matter of terms and conditions of the publication. The December 1, 2003 was proposed as a tentative deadline for submission of papers to the editor with expected publication of the proceedings by the end of 2004.

#### 3. Tsunamis from Asteroid/Comets Impact

Dr.V.Gusiakov reported on his participation in the ICSU-sponsored meeting on the Asteroid/Comets Impact to the Society that was held in Paris in April of 2003. Objectives of the Paris meeting were to establish an active collaboration among the participating scientific Unions to prepare an ICSU proposal on the asteroid/comets hazard study. This proposal for Category I Grant for the 2004 ICSU Grant Programme has been prepared and presented to the ICSU Committee on Scientific Planning and Review (CSPR) for reviewing. Proposal is centered on conducting a multi-disciplinary workshop to be held in April-May of 2004 somewhere in Europe. The main purpose of the workshop will be to bring together the key researchers in the variety of disciplines (astronomy, geology, geophysics, geography, economics, psychology, risk management) as well as representatives of leading inter-governmental agencies to consider what is known and what are the major open questions regarding how comet/asteroid impacts may influence human society in the near future. Its output is seen as a balanced report that would reflect a multi-union position statement on the subject of comet-asteroid impacts and their possible hazard for society. The risk of tsunami from the oceanic impact is one the key items considered in the project proposal. The members of the commission made comments on how the IUGG Tsunami Commission could participate in this activity. At the planned 2004 workshop, this subject should be an item for (at least one) invited paper. It was suggested that V.Gusiakov should continue his contacts as IUGG representative at the steering committee for the workshop planning and arrangement.

### 4. The 2005 Tsunami Symposium

In Sapporo, we had XXI (since 1961) International Tsunami Symposium (its full list can be found at <a href="http://omzg.sscc.ru/tsulab/IUGGTChistory.htm">http://omzg.sscc.ru/tsulab/IUGGTChistory.htm</a>). In the years between the IUGG General Assemblies the symposium is being conducted as independent meeting or in association with the General Assembly of one of our co-sponsoring Associations (IASPEI, IAPSO, IAVCEI). For 2005, an offer to hold the Tsunami Symposium was obtained from Greece. The Commission welcomed the proposal made by Dr.G.Papadopoulos to have the next International Tsunami Symposium in Greece in the last week of June, 2005 on the Crete Island (Chania or Heraklion). The Institute of Geodynamics, the National Observatory of Athens will serve as leading institution for local arrangements, a 1-day field trip is planned for visiting paleotsunami sites on the north coast of Crete followed by an optional 2-3-day trip to the Thera Island (Santorini). Taking into account the advantage of the next IASPEI General Assembly being conducted in Chile on October 2 to 8, 2005 in close proximity in time from the XX ITSU Session, it was decided to hold

the Tsunami Workshop within the framework of the IASPEI Assembly. The particular subject of this workshop will be defined after discussion with the ICG/ITSU.

#### 5. Election of new Commission members

In 2003, the commission membership consisted of 28 members. According to the Commission's rules, failure to participate in the three consecutive business meetings results in the loss of membership. Among the present Commission membership, R.Braddock (Australia) and H.Mioshi (Japan) missed the 1999 Birmingham and the 2001 Seattle meetings. As they were absent in Sapporo, both were deleted from the Commission. G.Hebenstreit (USA) was deleted from the membership in the end of 2001 by his personal written request forwarded to the Commission Chair on December 8, 2001.

Nomination for the new commission members was requested in the First Announcement distributed on March 27, 2003. Candidates can be nominated only by a present member of the Commission from the same country, or by any member for a country which does not have a current member. In response to this call, two new candidates were nominated: V.Titov from USA (by E.Bernard) and G.Downes from New Zealand (by J.Preuss). Both were put in the ballots and elected as new Commission members. The updated list of the current Commission membership can be found at <a href="http://omzg.sscc.ru/tsulab/IUGGTCmembers.html">http://omzg.sscc.ru/tsulab/IUGGTCmembers.html</a>.

## 6. Election of new Commission Officers

In Sapporo, the terms of all commission officers except one of Vice-Chairs (K.Satake, who was elected for his position in 1999) were over. Nomination for the new commission officers were announced in the First Announcement distributed on March 27, 2003. After some preliminary discussion, made by email correspondence among the Commission members, the following slot of candidates was proposed:

Chair - Dr.Kenji Satake (Japan) Vice-Chair - Dr.Frank Gonzalez (USA) Vice-Chair - Dr.Gerassimos Papadopoulos (Greece) Secretary - Dr.Fumihiko Imamura (Japan)

All the candidates expressed their agreement to serve for the next four years. Candidate names were put in the ballots, and, after voting, all new Commission Officers were unanimously elected – Kenji Satake (Japan) as Chair, Frank Gonzalez (USA) and G.Papadopoulos (as Vice-Chairs) and F.Imamura (Japan) as Secretary.

On behalf of the Commission members, Dr.E.Bernard expressed sincere thanks and appreciation to the retired officer team (V.Gusiakov, S.Tinti, J.Lander) for their excellent service during the last eight years.

#### 7. An open discussion for any members to make comments or to raise questions

Under this agenda item, the commission members were invited to make comments or raise questions concerning any aspects of the commission activity in the past, present and future.

F.Camfield, IAPSO representative at the Commission and a member of the IUGG Executive Committee (EC), informed that the status of the Tsunami Commission has been repeatedly discussed at the recent IUGG EC meetings and that there were some proposals to re-consider its status making it as part of the IUGG Commission on Geophysical Risk and Sustainability. The Commission members unanimously expressed their opinion on the importance of keeping the present status, i.e. as IUGG inter-association commission, motivating it by the clearly outlined subject of the Commission activity (tsunamis as a very specific type of natural hazards) and the long-term (since 1961) history of the Commission existence within the IUGG.

Dr.A.Marchuk, recalling the already approved schedule for two next tsunami symposia (Greece, 2005; Italy, 2007), indicated that the next time window, that is still open, will be in 2009. Speaking on behalf of Director of the Institute of Computational Mathematics and Mathematical Geophysics, Siberian Division of Russian Academy of Sciences, he expressed the preliminary offer to host the 2009 International Tsunami Symposium in Novosibirsk. In that year, there will be 20-year anniversary of the 1989 International Tsunami Meetings (Research Symposium, Workshop and ITSU Session) in Novosibirsk that are still memorable for many of those who attended them. The year of 2009 looks like the nearest possibility to hold such a triple tsunami forum again.